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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,904	12/21/2001	Jack Hartstone Reeves	116-119US	5284
466	7590	09/21/2004	EXAMINER	
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			DANG, HUNG Q	
			ART UNIT	PAPER NUMBER
			2635	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/023,904

Applicant(s)

REEVES, JACK HARTSTONE

Examiner

Hung Q Dang

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 December 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12 and 13 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 14 and 15 have been renumbered as "12" and "13", respectively. 2. Claim 11 is objected to because of the following informalities: the phrase "normal present" should be changed to "normally present". Also, a comma is required between the words "output" and "said". Appropriate correction is required.

### *Drawings*

3. The drawings are objected to because all the boxes in figures 1-3 lack of descriptive labels.

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed "high voltage isolation means" in **claim 10** (as indicated on page 16 of the specification, the claimed isolation means" is the transformer 21) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

5. The drawings are objected to under 37 CFR 1.83(a) because they fail to show all the components as described in the specification. Clearly, all the details of the

submitted drawings do not match with all the details described in the specification; and there are more number of drawings than what indicated in the specification.

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "fence conductor" and the "short high voltage signal bursts" must be shown or the feature(s)

canceled from the claim 1; and the "remote control apparatus", the "housing" and the "contact means" must be shown or the features canceled from claim 7. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

7. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not

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clear, concise and exact as shown in the drawings. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. For example, the specification refers to unit 12 as a control circuit and Figure 2 shows unit 12 as capacitor; the specification refers to unit 14 as a transformer and Figure 2 shows unit 14 as a diode.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 2, 4-6, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over May U.S. Patent 5,651,025.

**Regarding claim 1**, May teaches a method of transmitting information along a fence conductor characterized in that the information is embedded within and spread across a series of short high voltage signal bursts (column 1, lines 9-11, 39-41 and column 4 lines 18-23). Even though May does not mention the signal is a high frequency signal, however, the term "high" frequency is a relative term. Therefore, the signal disclosed by May is a "high" frequency signal relative to slower frequencies.

**Regarding claim 3**, the specification of this application does not show the criticality of having the signal bursts having an amplitude in the range of a fraction of

one volt up to a maximum of several thousand volts. Therefore, one skilled in the art would recognize that such claimed range of voltages of said signal bursts can be easily achieved by one skilled practitioner through routine experimentations to achieve optimal transmission across said electrical fence.

**Regarding claim 4**, the specification of this application does not show the criticality of having the duration of individual burst in the range of 100-1000 microseconds. Therefore, one skilled in the art would recognize that such claimed range of duration of said signal bursts can be easily achieved by one skilled practitioner through routine experimentations to achieve desired and optimal data transmission across said electrical fence.

**Regarding claims 5 and 14**, May also discloses the method as claimed in claim 1, wherein each signal burst is encoded with one ore more digital bits (column 6 lines 49-59).

**Claims 6 and 15** are rejected for the same reasons as claim 5. May also discloses that frequency modulation can be used in said transmitting method (paragraph bridging columns 2-3).

**Regarding claims 2 and 10**, the specification of this application does not show the criticality of having the frequency range between 50-190KHz. Therefore, one skilled in the art would recognize that such preferably frequency range can be easily achieved by one skilled practitioner through routine experimentations in order to achieve the optimal data transmission.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over May U.S. Patent 5,651,025 in view of applicant's prior art admission.

**Regarding claim 7**, similarly as claim 1, May teaches an apparatus for transmitting information embedded within signal bursts across an electric fence, as mentioned above. However, May does not specifically teach a remote controller for controlling said electric fence.

Applicant's prior art admission discloses a remote control apparatus for controlling an electric fence (second paragraph of page 3 of the background of invention). Even though the prior art admittance does not specifically mention a housing, contact means for contacting a conductor and generation means, however, one skilled in the art would recognize that such components have to be equipped in said remote control apparatus in order to generate information across said fence. The claimed limitation "predetermined frequency range" is rejected for the same reasons as claim 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a remote controller to the electric fence disclosed by May, as evidenced by applicant's prior art admission, in order to remotely control data transmission across said electric fence.

10. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over May U.S. Patent 5,651,025 in view of applicant's prior art admission and in further view of Smith U.S. Patent 6,712,339.

**Regarding claims 8 and 9**, as mentioned above, May in view of applicant's prior art admission teaches a remote control apparatus as claimed in claim 7. However, May in view of applicant's prior art admission does not specifically disclose a volt/current meter.

Smith, in the same field of endeavor, teaches a remote control apparatus for an electric fence, which further includes a voltage meter (Figure 8) for reading voltage at the end of the fence system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a volt/current meter to the apparatus disclosed by May in view of applicant's prior art admission, as evidenced by Smith, in order to read voltage at the end of the fence system.

### **Allowable Subject Matter**

11. **Claim 11** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior arts of record fail to teach or disclose a remote control apparatus as claimed in claim 10, which further includes high voltage isolation means at the apparatus output; said high voltage isolation means including a capacitor of small value and rated to withstand voltages normal present on an electric fence installation.

### **Conclusion**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q Dang whose telephone number is (571) 272-3069. The examiner can normally be reached on 9:30AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (571) 272-3068. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HD

MICHAEL HORABIK  
SUPERVISORY PATENT EXAMINER  
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